



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

P.O. Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

AMENDED MITIGATED DETERMINATION OF NONSIGNIFICANCE (MDNS)

State Environmental Policy Act (SEPA)

PERMIT #BT9901

October 12, 2016

Applicant: Roger Hickey
Bio Recycling Corporation
PO Box 982
Centralia, WA 98531

Description of Proposal: North Ranch Lime Stabilization and Recycling Facility (Facility). The application for the above listed project was submitted to the Washington State Department of Ecology (Ecology) on February 23, 2016 by Roger Hickey (President).

The project operates in accordance with WAC 173-308 and is permitted by Ecology. The Facility is located at 820 E. Webb Hill Rd. Union, Washington and is located in Mason County. The Facility operations currently consist of a treatment plant and an adjacent 293-acre land application site. The treatment plant employs an alkaline stabilization process using quicklime. The adjacent land application site receives surface applications on a year round basis to enhance the production of agricultural crops. The plant primarily serves as a further treatment option for septic tank pumping companies. These companies typically pump from local septic tanks, small wastewater treatment plants, sewage pump station vaults, vault toilets, cesspools, holding tanks, RV dump stations, portable toilets, marine sanitation units and limited restaurant grease waste. Each septage delivery is weighed on truck scales, unloaded, screened, dewatered, mixed with lime and held in above ground tanks for 24 hours at the prescribed pH resulting in Class B biosolids. Samples are collected and analyzed according to state and federal regulations and results are reported to Ecology.

The treated biosolids are either surface applied without further treatment using irrigation/manure spray equipment to most of the acreage which currently produces primarily forage crops, or the solids are dewatered and sent to permitted Beneficial Use Facilities (BUF's) and the remaining liquid is applied to the land. The liquid portion may be further treated to reduce ammonia and organic nitrogen, COD and BOD and suspended solids.

Future plans call for pasteurizing both the dewatered solids and the liquid fraction to meet Class A exceptional quality criteria. Class A products manufactured on site may receive further refinement on or offsite and eventually marketed as soil amendments.

Proposed Site Plan and Project Description

The Facility accepts septage, sewage and biosolids, then processes the material in accordance with 40 CFR 503 and WAC 173-308. The primary methods of treatment include lime

stabilization, solids separation, dewatering and heat treatment. The following description covers current development as well as currently anticipated future processing.

1. Weight Scale
2. Screen and Grit removal
3. pH adjustment
4. 24 hour hold tanks
5. Land Application
6. Water and soil monitoring
7. Thickening and Dewatering
8. Class B dewatered solids disposition
9. Heat Treatment
 - A. Liquid
 - B. Dewatered solids
10. Class A product
11. Odor Control
 - A. Release prevention
 - B. Capture and treatment
 - C. Dispersion

Processing features and equipment that may be added in the future and are a part of this proposal include the following:

1. Additional treatment tanks
2. Additional Class A product tanks
3. Class A soil product storage area
4. Tank aeration systems
5. Yard paving
6. Additional odor control equipment
7. An alternative source of energy for heat treatment
8. Alternative equipment for heat treatment
9. Covered wood storage for boiler fuel
10. Installation of a surface impoundment

The Facility is located at 820 E Webb Hill Rd, Union, Mason County, WA. It consists of approximately 300 acres of undeveloped land that is accessed from the Webb Hill Rd via the McReavy Rd. in Mason County. The site is rolling fields, gently dipping to the southwest of the property: an ephemeral stream is formed during the rainy season and flows off-property to the southwest. Vegetation on the site currently consists of pasture grass, Douglas and Noble fir, Scotch broom and blackberries. Forested private land surrounds the site.

Location of Proposal:	820 E Webb Hill Rd, Union WA
Section/Township/Range:	Section 18, T21N, R3W
Latitude/Longitude:	47.310855, -123.110754

Tax Parcel Numbers & Legal Description:	The Kirk Company, 32118-10-02000, 312118-24-00000, 32118-40-00000, 32118-31-00000, Zoning 83-Resource
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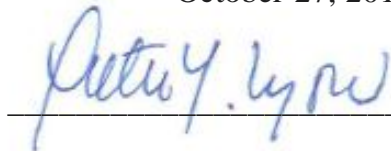
Threshold Determination: The lead agency for this proposal has determined that the attached mitigating conditions, along with required compliance with applicable County, State and Federal codes will mitigate all probable significant adverse impacts upon the environment.

An Impact Statement is not required under RCW 43.21.030(C). This decision was made after review by the Lead Agency of a completed Environmental Checklist and other information on file with the Lead Agency. This information is available to the public on request.

Mitigating Conditions: See Enclosure

Jurisdiction: Washington State
Lead Agency: Department of Ecology
Responsible Official: Peter Y. Lyon, Regional Section Manager
Waste 2 Resources Program

Date of Issue: October 12, 2016
Comment Deadline: October 27, 2016



Peter Y. Lyon, W2R Program, SWRO Section Manager

Note: The issuance of this Mitigated Determination of Non-Significance does not constitute project approval. The applicant must comply with all applicable permit requirements prior to project initiation.

Washington State Department of Ecology
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(360) 407-6055

Enclosure: Mitigating Discussion and Conditions

By certified mail: 91 7108 2133 3939 7125 2367

cc: Seth Book, Skokomish Tribe
Erica Marbet, Squaxin Island Tribe
Bob Hager, Lower Hood Canal Watershed Coalition
Scott Brewer, Hood Canal Coordinating Council
Debbie Riley, Mason County Public Health
Mason County Department of Planning
Washington Department of Fish & Wildlife
Bio Recycling North Ranch Interested Parties List

AMENDED MDNS ENCLOSURE

PERMIT #BT9901

Information Reviewed

The environmental threshold determination and conditions are substantially based on analysis of information obtained from the following documents. Documents and other related information can be viewed online during the public comment period at the following site:

<http://www.ecy.wa.gov/programs/swfa/biosolids/CommentPeriodNorthRanch.html>. Paper copies are also available for public review from 8:00 a.m. to 5:00 p.m. at the Department of Ecology, 300 Desmond Drive SE, Lacey, WA 98503. Please contact Peter Lyon at (360) 407-6381 or email peter.lyon@ecy.wa.gov with questions.

List of documents reviewed and environmental characteristics considered:

1. Master Applications submitted November 26, 2015
2. SEPA Environmental Checklist submitted February 18, 2016.
3. Site Specific Land Application Plan (SSLAP) submitted February 23, 2016

Mitigation Discussion: Bio Recycling's North Ranch site has a history of biosolids over application that has resulted in high residual soil nitrate concentrations and groundwater nitrite + nitrate concentrations exceeding the State's groundwater criteria. Despite strides made over the past several years to reduce nitrogen loading on the site, residual soil nitrates in the top two feet remain well above the target level of 60 pounds per acre, and groundwater nitrate results are relatively unchanged.

In order to prevent further adverse impacts to groundwater from the flushing of built-up soil nitrates into groundwater beyond what is already occurring as a result of precipitation, limitation of application of filtrate to evapotranspiration rates will ensure that filtrate does not infiltrate to groundwater.

Mitigating Conditions: Submit an amended application for coverage under the Statewide Biosolids General Permit to the Department of Ecology that includes the following limitations on application of filtrate to the land at the site:

- (1) Limit application of filtrate so as not to exceed agronomic rates to meet the crop's nutrient requirements (consistent with the Biosolids General Permit and WAC 173-308-190).
- (2) Until directed by conditions of final permit coverage issued by Ecology, limit application of filtrate so as not to exceed evapotranspiration rates to ensure that the liquid does not infiltrate to groundwater.

To accomplish this on a schedule to be provided under an upcoming permit approval, develop a monthly water budget using information from the Washington Irrigation Guide or other method accepted by Ecology, followed by development of an irrigation plan for Ecology's review and approval that would specify application only in amounts that don't exceed the crop's irrigation requirements and only during months when supplemental irrigation water is necessary.